REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Official Action dated October 18, 2006. In view of the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 10, 12-13, 15-26 are under consideration in this application. Claims 11, 14 and 22 are being cancelled without prejudice or disclaimer. Claims 10 and 15-21 are being amended, as set forth in the above marked-up presentation of the claim amendments, in order to more particularly define and distinctly claim Applicant's invention. New claims 23-26 are being added.

The claims are being amended to correct formal errors and/or to better disclose or describe the features of the present invention as claimed. All the amendments to the specification and the claims are supported by the specification, especially the drawings. Applicant hereby submits that no new matter is being introduced into the application through the submission of this response.

Prior Art Rejections

Claims 10-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over US Pub. No. 2002/0150311 of Lynn (hereinafter "Lynn") in view of US Pat. No. 6,604,108 to Nitahara (hereinafter "Nitahara"). This rejection has been carefully considered, but is most respectfully traversed.

The document processing system of the invention, as now recited in claim 10, comprises: an input unit for reading an image (cancelled claim 11) of a hardcopy document (e.g., a bill or a commercial paper, p. 8, lines 1-2; p. 10, line 18; Figs. 2 & 9) and for reading information from a storing means which is printed on or embedded in the hardcopy document (e.g., text, an one-dimensional, 2D or 3D bar code, a magnetic tape, an IC chip; and an encoded print into a logo mark, photograph or some other graphic item, such as a

watermark, photograph, holographic, p. 9, lines 1-9); <u>a detecting unit for detecting the</u> <u>storing means (Step 503 in Fig. 5) which is stored with document processing information</u> <u>including hardcopy document handling procedures</u> (Fig. 10; pp. 16-17; (i.e., *"the layout* *information: rule mark positions, frame position, frame attributes (box for sum, box for date,* *etc.), and character types in frame (numerals, Chinese characters, Japanese phonetic letters,* *etc.)"* p. 2, lines 2-7) to be executed in connection with the hardcopy document. If the storing means is detected, the document processing information is extracted from the storing means (*"encoded document processing information is read and decoded to obtain the document* *processing information"* p. 12, lines 14-15), and at least one of the hardcopy document handling procedures is executed by a document processor using the document processing information extracted from the storing means (Steps 504, 506, 511 in Fig. 5). If the storing means is not detected, a document form/format of the image of the hardcopy document is identified to extract corresponding document processing information from a document processing information dictionary kept within a document processing information database, and at least one hardcopy document handling procedure is executed by a document processor using the document processing information extracted from the document processing information dictionary (Steps 507, 508, 509, 511 in Fig. 5).

The document processing information *"on document forms or <u>formats</u>* (p. 3, line 15)" includes *"the document form, the processing procedure, the processing method and the* *format of the document 201 are encoded into the two-dimensional bar code 202 and stated in* <u>*a prescribed position*</u>*, such as a corner of the document. In particular, the document* *handling procedure may be a document cutting step in conjunction with<u> a document cutting</u>* <u>*position*</u>*, a seal stamping step in conjunction with <u>a seal stamping position</u>, a document* *identification step in conjunction with a document ID, a document format identification step* *in conjunction with a document format ID, an encryption step in conjunction with a* *encryption key, or a decryption step in conjunction with a decryption key* (p. 8, last paragraph)." Examples of the "hardcopy document handling procedure" includes "identifying document" and "identifying document format", as stated in the claims, and "reading of entered items", "posting an acknowledging seal" and "cutting the document" (p. 13 lines 7-10). In other words, "hardcopy document handling procedure" is an executable action (see 4th clause of claim 10).

The invention is also directed to a software product for providing a hardcopy document, as recited in claim 21, comprising: a module for printing on or embedding in the hardcopy document a storing means, an inputting module for reading an image of the hardcopy document and for reading information from the storing means, a detecting module for detecting said storing means which stores document processing information including hardcopy document handling procedures to be executed in connection with the hardcopy document, and a module for executing at least one hardcopy document handling procedure. Claim 21 also recites the two "if" paragraphs at the end of claim 10.

The invention is also directed to a document generating software product, as now recited in claim 20, comprising all the components of claim 21, and a communication module for enabling a prospective document user wishing to have a hardcopy document made to notify a document generator of requirements regarding a desired hardcopy document layout and a desired hardcopy document handling procedure; a document layout making module for making a document layout according to the requirements from said prospective document user; a document candidate presenting module for presenting to the prospective document user document candidates made by the document layout making module; a document selecting module for letting the prospective document user select a document candidate out of the document candidates presented by the document candidate presenting module; a document processing information determining module for determining document processing information including information of the desired hardcopy document handling procedure; a storing means module for selecting a storing means, encoding the document processing information, and for storing the encoded document processing information in the storing means.

Applicant respectfully contends that none of the cited references teaches or suggest "extracting document processing information either from such a storing means on the hardcopy document if the storing means is detected on the hardcopy document, or from a document processing information dictionary if the storing means is not detected on the hardcopy document" as in the present invention.

The present invention physically transports the hardcopy document with the storing means from the production site to another site such that it uses a detecting unit for detecting the storing means at the other site and then extracts document processing information from

-10-

two different sources depending upon if the storing means is detected on the paper-based document. The present invention mainly extracts the document processing information from the storing means on the document. Only when detecting the storing means is unsuccessful, the invention extracts document processing information corresponding to the document image from the document processing information dictionary (which is kept within a document processing information database). The extracting of document processing information directly form the storing means is faster and more accurate (without reaching the database and avoiding mistakes in the process).

The invention is especially advantageous for new document processing information not yet available in the document processing information database. In the prior art, if new document processing information is not available in the document processing information database, the hardcopy document cannot be processed prior to the new document processing information is updated in the database. However, the invention prints on or embeds in new document processing information on the hardcopy document before adding the information into the database. Therefore, the newest document processing information can be executed prior to or without being added into the database according to the invention.

In contrast, to create a digital image of a paper-based document ([0023]), Lynn's system 100 generates a globally unique identifier the paper-based document to be either directly printed on the paper-based document or printed on a label which is then posted on the paper-based document ([0027]). Once the digital image is created, the paper-based document may be stored (with or without the document holder 400) in a traditional paper-based filing system (i.e., file folder and/or filing cabinet) ([0060]). Lynn transports a image repository 226, which is an image directory on a DVD or CD-ROM disk, from one geographic location to another ([0041]). A computer readable portion 304 of a sample label 300 (Fig. 3) is used to "link and/or contain, transport, and store the globally unique identifier and meta-data to be used when the scanned/digital image is stored on image storage mechanism 130 of FIG. 1 ([0046])". The globally unique identifier on a digital document image is intended to be electronically transported with the digital document image to other locations, but the globally unique identifier on the paper-based document is physically left in the filing system in one location with the paper-based document and which is not intended to be physically transported to different locations. Since Lynn's paper-based document is not

intended to be physically transported to different locations, the globally unique identifier thereon is not intended to be detected at a different location as the storing means of the present invention, and then processed differently based upon the storing means detecting result. Once the paper-based document is filed in the filing cabinet, Lynn does not detect the globally unique identifier on the paper-based document. Lynn also does not extract document processing information from the globally unique identifier on the paper-based document if the globally unique identifier is detected on the paper-based document, or from a document processing information dictionary if the globally unique identifier is not detected on the paper-based document.

As admitted by the Examiner (p. 2, last four lines of the outstanding Office Action), Lynn "*fails to teach an invention of determining whether a format of the hardcopy document is available in a database.*" Nitahara was cited to provide such a teaching.

However, Nitahara mainly supports a digital system. Its "*information mart content files are produced from data that resides in the various disparate **electronic** data storage facilities associated with the enterprise. A content file may be an existing file from the enterprise's data storage facilities (e.g. an html [electronic] document, a data table, a graphic, etc.) or it may be the result of processing of source data from a single source file (e.g. a graphic generated from a database record, a portion of an [electronic] document, etc.), or it may be the result of processing of source data from multiple source files (e.g. a graphic generated using multiple database records from different databases). (col. 2, lines 34-45)*".

The only instance Nitahara mentioned a hardcopy document was in col. 6, line 47-48. Nitahara uses the source file (in one or more databases) of "*a scanned version of a hard copy document*" as the content file without putting any storing means thereon, much less about physically transporting such a storing means on the hardcopy document. Lynn also does not extract document processing information from such a storing means on the hardcopy document if the globally unique identifier is detected on the hardcopy document, or from a document processing information dictionary if such a storing means is not detected on the hardcopy document.

Applicant contends that Lynn and Nitahara do not teach or suggest each and every feature of the present invention as recited in at least independent claims 10 and 20-21. As

such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.
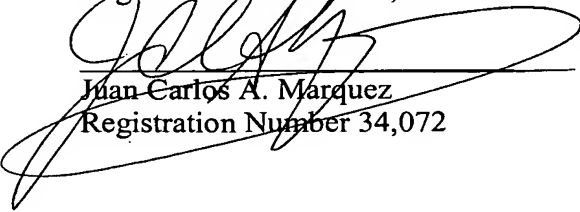
Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed and the prior art references upon which the rejections in the Office Action rely, Applicant respectfully contends that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicant's undersigned representative at the address and telephone number indicated below.

Respectfully submitted,

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